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in the above mentioned Official Action. Such action is respectfully requested and is now believed to be appropriate and proper.

In the outstanding Official Action, the Examiner objected to claims 5 and 10 because of a noted informality. By the present response, the noted informality has been eliminated and it is thus respectfully submitted that the Examiner's objection has now been overcome.

In the outstanding Official Action, claims 1 and 6 were rejected under 35 U.S.C. § 102(b) as being anticipated by YAMADA (U.S. Patent No. 4,710,012). Claims 2 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over YAMADA. Finally, claims 5 and 10 were rejected under 35 U.S.C. § 103(a) as unpatentable over YAMADA, in view of FUKUI (U.S. Patent No. 6,167,202).

The Examiner indicated claims 3, 4, 8 and 9 to be objected to for depending on a rejected base claim. The Examiner indicated that these claims would be allowable if rewritten into independent form including all of the limitations of the base claim and any intervening claims.

The Examiner is respectfully thanked for the indication of allowable subject matter.

Without acquiescing in the propriety of the Examiner's rejections asserted against claims 1 and 6, Applicants have, merely to expedite the issuance of a patent directed to features of the present invention, rewritten claims 3 and 8 into independent form.

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Accordingly, Applicants will have rendered each of the Examiner's outstanding rejections moot and will have placed the application in condition for allowance.

In the outstanding Official Action, the Examiner set forth a statement of reasons for indication of allowable subject matter. In this regard, while Applicants do not disagree that the features enumerated by the Examiner provide a basis for patentability, Applicants further note that each of the claims in the present application is directed to a combination of features and that the patentability of each claim is also based upon the totality of features recited in each particular claim. Accordingly, the reasons for indication of allowable subject matter should not be limited to those particular features of the combinations listed by the Examiner.

In view of the above, Applicants respectfully request reconsideration and withdrawal of each of the outstanding rejections and an indication of the allowability of all of the claims pending in the present application, in due course. Such action is respectfully requested and is now believed to be appropriate and proper.

#### SUMMARY AND CONCLUSION

Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so. Applicants without acquiescing in the propriety of any of the outstanding rejections, have amended the independent claims to incorporate therein features indicated to be allowable by the Examiner. Applicants have

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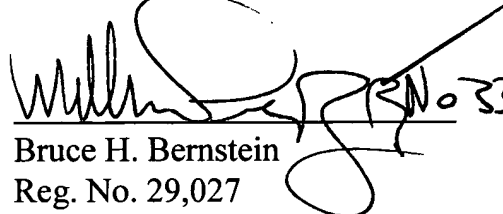
further amended all the claims to improve their form and the terminology thereof as well as to render the recitations even more clear.

Accordingly, Applicants have provided a clear evidentiary basis for the patentability of all of the claims in the present application and respectfully request an indication to such effect, in due course.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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**MARKED-UP COPY OF THE CLAIMS**

1. (Amended) A zoom flash[, ] comprising:

a light emitter;

a zoom driver which moves said light emitter along an axis to vary an illumination angle;

a [detecting device] detector which detects a zoom position of said light emitter;

a [calculation device] calculator which calculates a pre-flash emission level according to the detected zoom position so that illuminance on an object at a predetermined distance is substantially constant regardless of a variation of said illumination angle; [and]

a [control device] controller which activates said light emitter to emit a preliminary flash emission, before a main flash emission, by supplying a voltage corresponding to said pre-flash emission level for said light emitter; and

a memory in which a maximum guide number that varies in accordance with said zoom position, a constant predetermined reference guide number, and a predetermined reference flash emission level serving as a correction constant are stored.

wherein said maximum guide number, said reference guide number, and said reference flash emission level are stored in said memory, and wherein said calculator calculates a pre-flash emission level using the following equation:

$$\underline{V_{fp} = V_a \times (G_{nos}/G_{no}(\text{zoom}))^2}$$

wherein "V<sub>fp</sub>" represents the pre-flash emission level;

"V<sub>a</sub>" represents the reference flash emission level;

"G<sub>nos</sub>" represents the reference guide number; and

"G<sub>no (zoom)</sub>" represents the maximum guide number corresponding to the detected zoom position.

2. (Amended) The zoom flash according to claim 1, wherein said [calculation device] calculator calculates said pre-flash emission level so that an effective guide number is substantially constant regardless of said variation of said illumination angle.

4. (Amended) The zoom flash according to claim [3] 1, further comprising a terminal connector via which said zoom flash [can be] is electrically [connected] connectable to a camera body;

wherein said zoom driver moves said light emitter in accordance with a focal length of a photographing lens of [said] the camera body [in a case where] when said zoom flash is electrically connected to [said] the camera body.

5. (Amended) The zoom flash according to claim 1, wherein said control device controls said light emitter to perform a pre-flash emission in a flat emission mode.

6. (Amended) A flash photography system having a camera body and at least one zoom flash, said at least one zoom flash being [activated] activatable to emit a preliminary flash emission before a main flash emission, wherein said at least one zoom flash comprises:

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a light emitter;

a zoom driver which moves said light emitter along an axis to vary an illumination angle; and

a [detecting device] detector which detects a zoom position of said light emitter;

wherein one of said camera body and said at least one zoom flash comprises:

a [calculation device] calculator which calculates a pre-flash emission level according to the detected zoom position so that an illuminance on an object at a predetermined distance is substantially constant regardless of a variation of said illumination angle; [and]

a [control device] controller which activates said light emitter to emit a preliminary flash emission by supplying a voltage corresponding to said pre-flash emission level for said light emitter before a main flash emission; and

a memory in which a maximum guide number that varies in accordance with said zoom position, a constant predetermined reference guide number, and a predetermined reference flash emission level serving as a correction constant are stored;

wherein said maximum guide number, said reference guide number, and said reference flash emission level are stored in said memory, and wherein said calculator calculates a pre-flash emission level using the following equation:

$$V_{fp} = V_a \times (G_{nos}/G_{no}(\text{zoom}))^2$$

wherein "V<sub>fp</sub>" represents the pre-flash emission level;

"Va" represents the reference flash emission level;

"Gnos" represents the reference guide number; and

"Gno (zoom)" represents the maximum guide number corresponding to the detected zoom position.

7. (Amended) The flash photography system according to claim 6, wherein said [calculation device] calculator calculates said pre-flash emission level so that an effective guide number is substantially constant regardless of said variation of said illumination angle.

9. (Amended) The flash photography system according to claim [8] 6, further comprising a terminal connector via which said zoom flash [can be] is electrically [connected] connectable to a camera body;

wherein said zoom driver moves said light emitter in accordance with a focal length of a photographing lens of said camera body [in a case where] when said zoom flash is electrically connected to said camera body.

10. (Amended) The flash photography system according to claim [8] 6, wherein said [control device] controller controls said light emitter to perform a pre-flash emission in a flat emission mode.